Seasonal Outlook Great Lakes Winter 2020-2021



Issued by the North American Ice Service

1 December 2020

Lake Superior

Winter temperature and ice forecasts.

Above normal temperatures are forecast from December and January, while near normal temperatures are expected for February 2021. Near to below normal ice conditions are forecast.

Thunder Bay.

Outlook for December...

December 1-14: Open water except occasional patches of 1-3 tenths new lake ice along parts of the shore.

December 15-25: 1-3 tenths new and thin lake ice along the western and northeastern shores.

December 26-31: 4-6 tenths new and thin lake ice along the western and northeastern shores.

Outlook for January...

January 1-8: 4-6 tenths new and thin lake ice.

January 9-20: 7-8 tenths new and thin lake ice.

January 21-31:7-8 tenths new and thin lake ice including consolidated thin and medium lake ice along the western and northeastern shores.

Outlook for February...

February 1-15: Consolidated medium lake ice.

February 16-28: Consolidated thick lake ice.

Nipigon and Black Bays.

Outlook for December...

December 1-10: 9-9+ tenths new and thin lake ice in Black Bay and 1-3 tenths new and thin lake ice in western Nipigon Bay.

December 11-18: 9-9+ tenths new and thin lake ice in Black Bay and 7-8 tenths new and thin lake ice in western Nipigon Bay.

December 19-31: Consolidated thin and medium lake ice in Black Bay and 9-9+ tenths thin and medium lake ice in Nipigon Bay.

Outlook for January...

January 1-10: Consolidated thin and medium lake ice in Black Bay and Nipigon Bay.

January 11-20: Consolidated medium lake ice in Black Bay and Nipigon Bay.

January 21-31: Consolidated medium and thick lake ice Black Bay and Nipigon Bay.

Outlook for February...

February 1-28: Consolidated thick lake ice.

From Grand Marais Minnesota to the entrance to Nipigon Bay.

Outlook for December...

December 1-31: Open water.

Outlook for January...

January 1-15: 1-3 tenths new and thin lake ice from Black Bay to Nipigon Bay.

January 16-31: 4-6 tenths new and thin lake ice from Thunder Bay to Nipigon Bay.

Outlook for February...

February 1-20: 4-6 tenths thin and medium lake ice along the shore. 1-3 tenths thin and medium lake ice extending to the northern shore of Isle Royale.

```
Seasonal Outlook - Great Lakes - Winter 2020-2021
```

February 21-28: 7-8 tenths thin and medium lake ice along the shore. 4-6 tenths thin and medium lake ice extending to the northern shore of Isle Royale.

From Grand Marais to Duluth.

Outlook for December...

December 1-31: Open water.

Outlook for January...

January 1-5: Open water.

January 6-20: Open water except 4-6 tenths new and thin lake ice near Duluth.

January 21-31: Open water except 9-9+ tenths thin and medium lake ice near Duluth.

Outlook for February...

February 1-28: Open water except 7-8 tenths thin and medium lake ice near Duluth. Consolidate medium lake ice along the shore near Duluth.

Southern Lake Superior west of Keweenaw Peninsula.

Outlook for December...

December 1-15: Open water.

December 16-22: Open water except 4-6 tenths new and thin lake ice in

Chequamegon Bay.

December 23-31: Open water except consolidated thin lake ice in Chequamegon Bay.

Outlook for January...

January 1-14: 1-3 tenths new and thin lake ice along the shore and near the Apostle Islands except consolidated medium lake ice in Chequamegon Bay.

January 15-25: 7-8 tenths new and thin lake ice along the shore except consolidated medium lake ice in Chequamegon Bay.

January 26-31: 7-8 tenths thin and medium lake ice along the shore except consolidated medium lake ice in Chequamegon Bay and the Apostle islands.

Outlook for February...

February 1-14: 9-9+ tenths thin and medium lake ice along the shore except consolidated medium lake ice in Chequamegon Bay and the Apostle Islands.

February 15-28: 9-9+ medium lake ice along the shore except consolidated thick lake ice in Chequamegon Bay. Consolidate medium lake ice near the Apostle Islands.

Southern Lake Superior east of the Keweenaw Peninsula.

Outlook for December...

December 1-31: Open water.

Outlook for January...

January 1-15: Open water.

January 16-31: Open water except 4-6 tenths new and thin lake ice along parts of the shore.

Outlook for February...

February 1-14: Open water except 7-8 tenths new and thin lake ice along parts of the southern shore and east of the Keweenaw Peninsula. Consolidated medium lake ice in sheltered bays.

February 15-28: 9-9+ tenths thin and medium lake ice along the southern shore and east of the Keweenaw Peninsula. Consolidated medium lake ice in sheltered bays.

Whitefish Bay.

Outlook for December...

December 1-31: Open water except 1-3 tenths new and thin lake ice in sheltered bays.

Outlook for January...

January 1-15: Open water except 1-3 tenths new and thin lake ice along the shore. Consolidated thin lake ice in sheltered bays.

January 16-22: 4-6 tenths new and thin lake ice except consolidated thin lake ice in sheltered bays.

January 23-31: 7-8 tenths new and thin lake ice except consolidated medium lake ice in the southeastern section.

Outlook for February...

February 1-20: 7-8 tenths thin and medium lake ice except consolidated medium lake ice in the extreme southeastern section.

February 21-28: 9-9+ tenths thin and medium lake ice except consolidated thick lake ice in the eastern section.

From Whitefish Bay northwards to Michipicoten Bay.

Outlook for December...

December 1-31: Open water.

Outlook for January...

January 1-22: Open water.

January 23-31: Open water except 1-3 tenths new and thin lake ice along parts of the shore south of Michipicoten Bay.

Outlook for February...

February 1-15: Open water except 4-6 tenths new and thin lake ice along parts the shore south of Michipicoten Bay.

February 16-28: Open water except 7-8 tenths thin and medium lake ice along the shore.

From Michipicoten Bay to the entrance to Nipigon Bay.

Outlook for December...

December 1-31: Open water.

Outlook for January...

January 1-15: Open water.

January 16-31: Open water except occasional patches of 1-3 tenths new lake ice along parts of the shore from Marathon to Nipigon Bay.

Outlook for February...

February 1-28: Open water except occasional patches of 1-3 tenths new and thin lake ice along parts of the shore from Marathon to Terrace Bay. 4-6 tenths new and thin lake ice along parts of the shore near Nipigon Bay.

Elsewhere in Lake Superior.

Outlook for December...

December 1-31: Ice free.

Outlook for January...

January 1-31: Ice free to open water.

Outlook for February...

February 1-28: Ice free to open water. Up to 1-3 tenths new and thin lake ice in patches.

Lake Michigan.

Winter temperature and ice forecasts.

Above normal temperatures are expected from December to February. Near to below normal ice conditions are forecast.

Green Bay.

Outlook for December...

December 1-15: Open water except 1-3 tenths new and thin lake ice in the southern section and in the Bays de Noc.

December 16-23: Open water except 4-6 tenths new and thin lake ice in the southern section. 7-8 tenths thin lake ice in the Bays de Noc.

December 24-31: Open water except 7-8 tenths thin lake ice in the southern section. Consolidated thin and medium lake ice in Bays de Noc.

Outlook for January...

January 1-10: 1-3 tenths new and thin lake ice except 7-8 tenths thin and medium lake ice in the southern section. Consolidated medium lake ice in the Bays de Noc.

January 11-25: 4-6 tenths new and thin lake ice except 9-9+ tenths thin and medium lake ice in the southern section. Consolidated medium lake ice in the extreme southern section and in the Bays de Noc.

January 26-31: 7-8 tenths thin and medium lake ice except consolidated medium lake ice in the southern and northern sections.

Outlook for February...

February 1-13: 7-8 tenths thin and medium lake ice except consolidated medium lake ice in the southern and northern sections.

February 14-28: 9-9+ tenths medium lake ice except consolidated thick lake ice in the southern and northern sections.

Northeastern Lake Michigan.

Outlook for December...

December 1-21: Open water.

December 22-31: Open water except 1-3 tenths new and thin lake ice along parts of the shore near the Straits of Mackinac.

Outlook for January...

January 1-10: Open water except 1-3 tenths new and thin lake ice along parts of the northern shore and near the Straits of Mackinac.

January 11-24: Open water except 1-3 tenths new and thin lake ice along the northern shore and near Beaver Island. 7-8 tenths new and thin lake ice northeast of Beaver Island.

January 25-31: Open water except 4-6 tenths new and thin lake ice along the northern shore and near Beaver Island. 7-8 tenths thin and medium lake ice north and east of Beaver Island.

Outlook for February...

February 1-10: 1-3 tenths new and thin lake ice except 7-8 tenths thin lake ice north and east of Beaver Island. 9-9+ tenths medium lake ice in the Straits of Mackinac.

February 11-28: 4-6 tenths new and thin lake ice except 9-9+ tenths medium lake ice north and east of Beaver Island. Consolidated medium and thick lake ice along the northeastern shore and in the Straits of Mackinac.

Elsewhere in Lake Michigan.

Outlook for December...

December 1-31: Ice free to open water.

Outlook for January...

January 1-14: Ice free to open water.

January 15-31: Open water except isolated areas of 1-3 tenths new and thin lake ice along the southern and western shores.

Outlook for February...

February 1-21: Open water except isolated areas of 4-6 tenths new and thin lake ice along shore.

February 22-28: Open water.

Lake Huron and Georgian Bay.

Winter temperature and ice forecasts.

Above normal temperatures are expected over Lake Huron and Georgian Bay from December to February. Near to below normal ice conditions are forecast.

North Channel.

Outlook for December...

December 1-25: Open water except isolated areas of 1-3 tenths new and thin lake ice in sheltered bays.

December 26-31: Open water except 4-6 tenths new and thin lake ice in parts of the eastern and western sections.

Outlook for January...

January 1-7: Open water except 4-6 tenths new and thin lake ice in parts of the eastern and western sections.

January 8-15: 1-3 tenths new and thin lake ice except 7-8 tenths thin and medium lake ice in the eastern and western sections.

January 16-31: 7-8 tenths thin and medium lake ice except consolidated medium lake ice in the eastern and western sections.

Outlook for February...

February 1-14: 9-9+ tenths medium lake ice except consolidated medium and thick lake ice in the eastern and western sections.

February 15-28: Consolidated thick lake ice.

St Mary's River.

Outlook for December...

December 1-9: 1-3 tenths new and thin lake ice.

December 10-21: 4-6 tenths new and thin lake ice.

December 21-31: 7-8 tenths thin lake ice except consolidated thin and medium lake ice in sheltered bays.

Outlook for January...

January 1-24: Consolidated thin and medium lake ice.

January 25-31: Consolidated medium and thick lake ice.

Outlook for February...

February 1-28: Consolidated thick lake ice.

South of Manitoulin Island westward to North-western Lake Huron.

Outlook for December...

December 1-31: Open water.

Outlook for January...

January 1-7: Open water.

January 8-15: Open water except 1-3 tenths new and thin lake ice in the northwestern section.

January 16-31: Open water except 1-3 tenths new lake ice south of Manitoulin Island. 4-6 tenths new and thin lake ice in the northwestern section.

Outlook for February...

February 1-28: Open water except 4-6 tenths new and thin lake ice south of Manitoulin Island. 7-8 tenths thin and medium lake ice in the northwestern section.

North-western Lake Huron near the Straits of Mackinac.

Outlook for December...

December 1-31: Open water.

Outlook for January...

January 1-10: Open water.

January 11-25: 1-3 tenths new and thin lake ice except 4-6 tenths new and thin lake ice in the western section.

January 26-31: 4-6 tenths new and thin lake ice except 7-8 tenths thin and medium lake ice in the southern section and in the Straits of Mackinac. Consolidated thin and medium lake ice in the northwestern section.

Outlook for February...

February 1-10: 7-8 tenths thin and medium lake ice except 9-9+ tenths medium lake ice in the Straits of Mackinac. Consolidated medium lake ice in the northern section.

February 11-28: 7-8 tenths thin and medium lake ice except consolidated medium and thick lake ice south in the western section.

From north-western Lake Huron to Saginaw Bay.

Outlook for December...

December 1-31: Open water.

Outlook for January...

January 1-10: Open water.

January 11-20: Open water except patches of 1-3 tenths new and thin lake ice along the shore south of Alpena.

January 21-31: Open water except 4-6 tenths new and thin lake ice along the shore.

Outlook for February...

February 1-5: Open water except 4-6 tenths new and thin lake ice along the shore.

February 6-19: Open water except 7-8 tenths thin lake ice along the shore.

February 20-28: Open water except 7-8 tenths thin and medium lake ice along the shore to Alpena. 4-6 tenths thin and medium lake ice south of Alpena.

Saginaw Bay.

Outlook for December...

December 1-10: Open water.

December 11-20: 1-3 tenths new and thin lake ice.

December 21-31: 7-8 tenths new and thin lake ice.

Outlook for January...

January 1-7: 9-9+ tenths thin lake ice.

January 8-15: 9-9+ tenths thin and medium lake ice.

January 16-31: Consolidate medium lake ice.

Outlook for February...

February 1-28: Consolidated medium and thick lake ice.

The southern and eastern shore of Lake Huron.

Outlook for December...

December 1-25: Open water.

December 26-31: Open water except occasional patches of 1-3 tenths new lake ice along the shore north of Goderich.

Outlook for January...

January 1-10: Open water except occasional patches of 1-3 tenths new and thin lake ice along the shore.

January 11-21: Open water except 4-6 tenths new and thin lake ice along the shore.

January 22-31: Open water except 7-8 tenths thin lake ice along the shore.

Outlook for February...

February 1-10: Open water except 7-8 tenths thin and medium lake ice along the southern shore. 9-9+ tenths thin and medium lake ice along the eastern shore.

February 11-28: 7-8 tenths thin and medium lake ice except 9-9+ tenths thin and medium lake ice along the eastern shore. Consolidated medium lake ice along the Bruce Peninsula.

Georgian Bay.

Outlook for December...

December 1-31: Open water except 1-3 tenths new and thin lake ice along parts of the northeastern shore.

Outlook for January...

January 1-10: Open water except 1-3 tenths new and thin lake ice along the northeastern shore. Consolidated thin lake ice in sheltered bays.

January 11-24: Open water except 7-8 tenths thin and medium lake ice along the northeastern shore. Consolidated medium lake ice in sheltered bays.

January 25-31: 4-6 tenths thin lake ice except 9-9+ tenths thin and medium lake ice in the northeastern section. Consolidated medium lake ice along the shore.

Outlook for February...

February 1-14: 4-6 tenths thin and medium lake ice except 9-9+ tenths medium lake ice in the northeastern section. Consolidated medium lake ice along the shore.

February 15-28: 7-8 tenths medium lake ice except 9-9+ tenths medium lake ice in the northeastern section. Consolidated thick lake ice along the shore.

Elsewhere in Lake Huron.

Outlook for December...

December 1-31: Ice free.

Outlook for January...

January 1-31: Open water to ice free.

Outlook for February...

February 1-28: Open water except 1-3 tenths new and thin lake ice in central portions of the lake.

Lake Erie and Lake St. Clair

Winter temperature and ice forecasts.

Above normal temperatures are expected from December to February. Near to below normal ice conditions are forecast.

Lake St Clair and the Western Basin.

Outlook for December...

December 1-20: Open water except occasional patches of 1-3 tenths new lake ice.

December 21-31: 1-3 tenths new and thin lake ice.

Outlook for January...

January 1-10: 4-6 tenths new and thin lake ice except 7-8 tenths new and thin lake ice in the Western Basin.

January 11-20: 7-8 tenths thin lake ice except 9-9+ tenths thin lake ice in the Western Basin.

January 21-31: 9-9+ tenths thin and medium lake ice.

Outlook for February...

February 1-14: 9-9+ tenths thin and medium lake ice except consolidated medium lake ice in eastern Lake St. Clair.

February 15-28: 9-9+ tenths medium lake ice except consolidated medium and thick lake ice in eastern Lake St. Clair.

The rest of Lake Erie.

Outlook for December...

December 1-21: Open water.

December 22-31: Open water except 1-3 tenths new and thin lake ice in Long Point Bay.

Outlook for January...

January 1-10: Open water except occasional patches of 1-3 tenths new and thin lake ice in the along the north shore. 7-8 tenths new and thin lake ice in Long Point Bay.

January 11-22: Open water 4-6 tenths new and thin lake ice in the western section and along the north shore.

January 23-31: Open water except 7-8 tenths thin and medium lake ice in the western and northern sections.

Outlook for February...

February 1-7: 4-6 thin and medium lake ice except 9-9+ tenths thin and medium lake ice in the western and northern sections.

February 8-23: 7-8 tenths new and thin lake ice along the northern shore except 9-9+ tenths medium lake ice in the western and southern sections.

February 24-28: 4-6 tenths medium lake ice in the western section and along the northern shore except 9-9+ tenths medium lake ice in the southern and eastern sections.

Lake Ontario.

Winter temperature and ice forecasts.

Above normal temperatures are expected from December to February. Near to below normal ice conditions are forecast.

Northeastern Lake Ontario.

Outlook for December...

December 1-31: Open water.

Outlook for January...

January 1-10: Open water except occasional patches of 1-3 tenths new and thin lake ice in sheltered bays.

January 11-20: Open water except 4-6 tenths new and thin lake ice in sheltered bays.

January 21-31: Open water except 4-6 tenths new and thin lake ice in the northeastern section. Consolidated thin lake ice in sheltered bays.

Outlook for February...

February 1-20: Open water except 4-6 tenths thin and medium lake ice in the northeastern section. 9-9+ tenths thin and medium lake ice near the shore. Consolidated medium lake ice in sheltered bays.

February 21-28: Open water except 7-8 tenths medium lake ice in the northeastern section. Consolidated medium lake ice in bays and along the shore.

Bay of Quinte.

Outlook for December...

December 1-15: Open water except patches of 1-3 tenths new lake ice.

December 16-25: 7-8 tenths new and thin lake ice.

December 26-31: 9-9+ tenths thin lake ice.

Outlook for January...

January 1-10: Consolidated thin lake ice.

January 11-31: Consolidated medium lake ice.

Outlook for February...

February 1-15: Consolidated medium lake ice.

February 16-28: Consolidated thick lake ice

Elsewhere in Lake Ontario.

Outlook for December...

December 1-31: Ice free to open water.

Outlook for January...

January 1-31: Open water except isolated patches of 4-6 tenths new and thin lake ice along the south shore and the north shore between Toronto and the Bay of Quinte.

Outlook for February...

February 1-28: Open water except isolated patches of 4-6 tenths new and thin lake ice along the south shore and the north shore between Toronto and the Bay of Quinte.

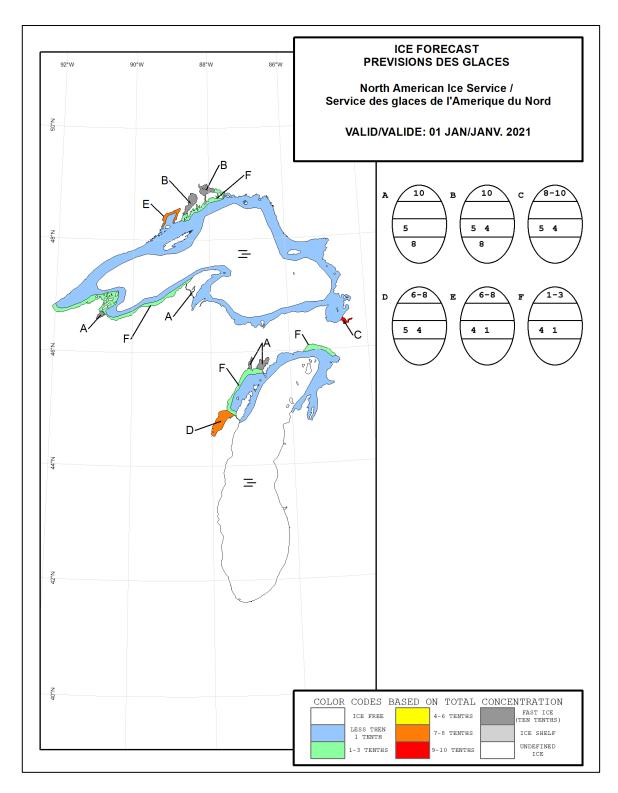


Figure 1: Expected ice conditions – western Great Lakes – 1 January 2021

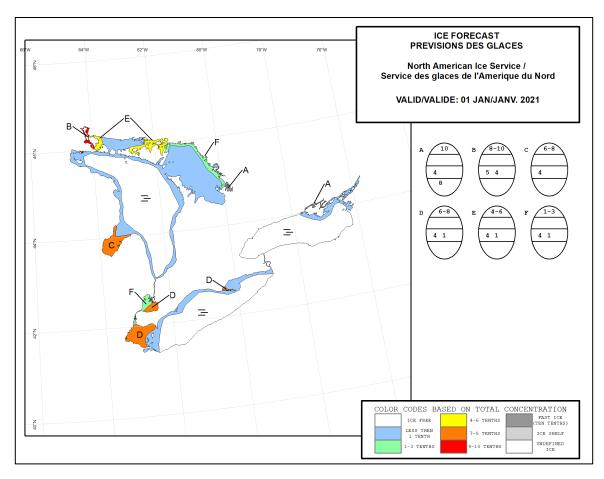


Figure 2: Expected ice conditions – eastern Great Lakes – 1 January 2021

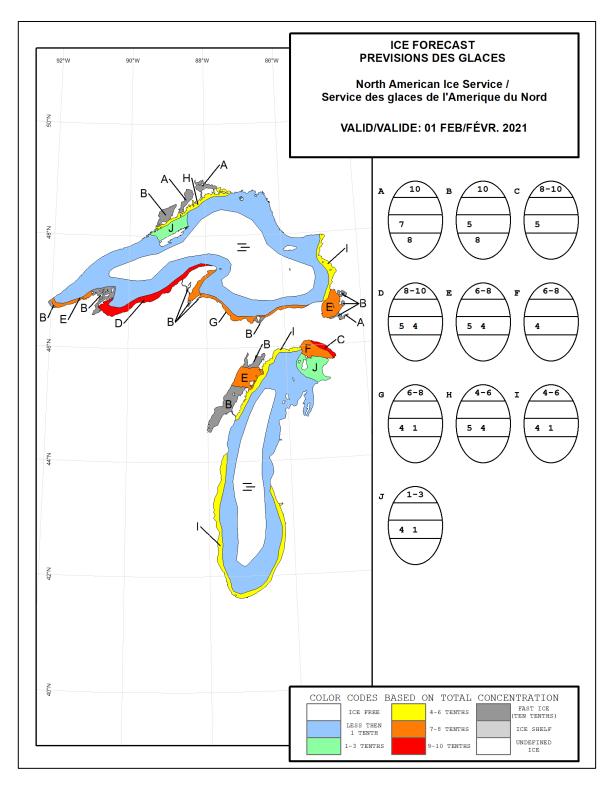


Figure 3: Expected ice conditions – western Great Lakes – 1 February 2021

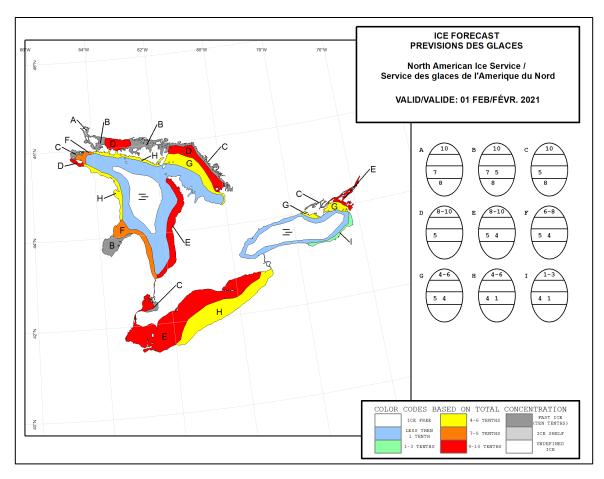


Figure 4: Expected ice conditions – eastern Great Lakes – 1 February 2021

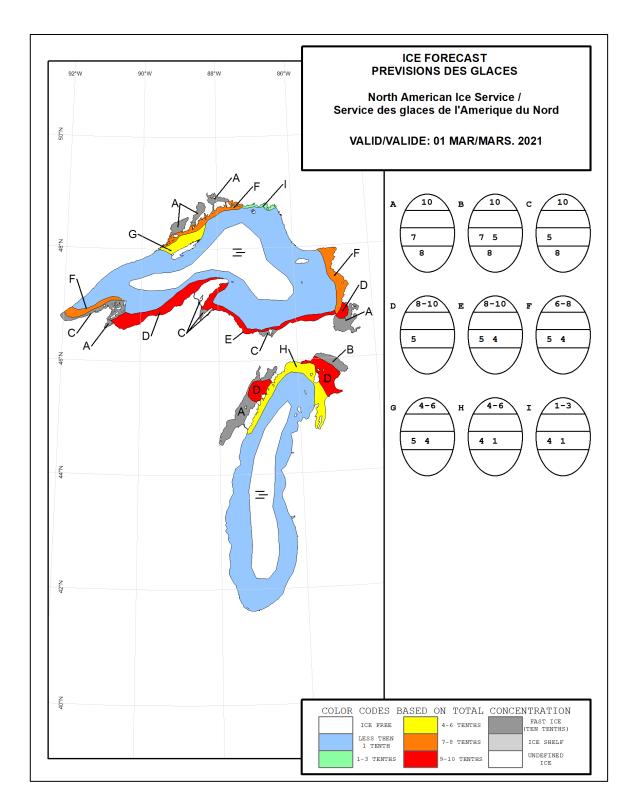


Figure 5: Expected ice conditions – western Great Lakes – 1 March 2021

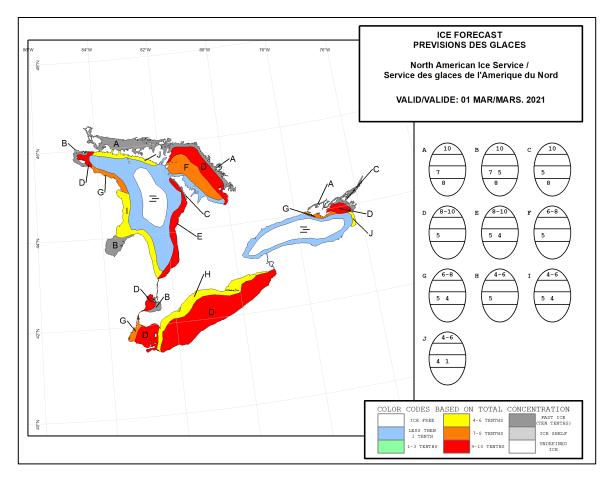


Figure 6: Expected ice conditions – eastern Great Lakes – 1 March 2021